## **AMENDMENTS**

## IN THE DRAWING

Please replace original drawing sheets 1-12 (13 pages) with formal drawing sheets 1-12 (13 pages) submitted herewith.

## IN THE CLAIMS

Claims 1-20 (cancelled).



- 21. (Currently Amended) An isolated polynucleotide for enhancing protein expression, wherein said polynucleotide emprising comprises a nucleic acid sequence of nucleotides 181-341 of SEQ ID NO: 1 having one thymidine inserted between position 206 and 207 of SEQ ID NO: 1, or a fragment thereof that includes said thymidine, wherein said the polynucleotide or the fragment enhances protein expression when incorporated downstream of an expression regulatory promoter sequence and upstream of a protein coding sequence.
- 22. (Currently Amended) The isolated polynucleotide according to claim 21, wherein said nucleic acid sequence has translation promoting activity to enhance expression of a nucleic acid sequence encoding a protein sequence. enhances said protein expression by increasing translation of the mRNA encoding said protein.
- 23. (Currently Amended) The isolated polynucleotide according to claim 21, wherein said nucleic acid sequence enhances said <u>protein</u> expression by increasing IRES activity.
- 24. (Currently Amended) An isolated polynucleotide that enhances for enhancing protein expression, which included wherein the polynucleotide comprises a nucleic acid sequence set out in SEQ ID NO: 7 and enhances protein expression by promoting mRNA translation in an IRES dependent manner when incorporated 5' of a protein coding sequence in an expression construct by promoting mRNA translation in an IRES dependent manner, said polynucleotide comprising a nucleotide sequence of SEQ ID NO: 7.

Claim 25 (cancelled).

26. (Previously Amended) An isolated polynucleotide consisting of the nucleotide sequence as set forth in SEQ ID NO: 7 over its entire length.

Claim 27 (cancelled).

- 28. (Previously Amended) An expression vector comprising an isolated polynucleotide according to claim 21 or claim 24.
- 29. (Currently Amended) A An isolated host cell transformed or transfected with the vector according to claim 28.
- 30. (Currently Amended) A method of expressing a protein *in vitro*, comprising the steps of:
- (a) transforming or transfecting a <u>an isolated</u> host cell with <del>an the expression</del> vector according to claim 53, <u>and</u>
- (b) growing the host cell in a medium under conditions where the cell expresses the protein.
- 31. (Currently Amended) A <u>The</u> method according to claim 30, <u>wherein the</u> <u>method</u> further <u>eomprising comprises</u>, <u>after step (b)</u>, a step of isolating the protein from the cell and/or the growth medium.

Claim 32 (cancelled).

- 33. (Previously Amended) A probe for screening substances that interact with IRES, comprising the polynucleotide according to claim 26, further comprising a detectable label.
- 34. (Previously Amended) A probe for screening IRES-dependent translation inhibitors, comprising the polynucleotide according to claim 26, further comprising a detectable label.
- 35. (Previously Amended) A composition comprising the isolated polynucleotide for enhancing protein expression according to claim 21.
- 36. (Previously Amended) A composition comprising the isolated polynucleotide for enhancing protein expression according to claim 24.



- 37. (Previously Amended) A method for determining a hypervirulent hepatitis C strain, comprising the steps of:
- screening a biological sample for the presence of the polynucleotide according (a) to claim 26, and;
- determining presence or absence of the hypervirulent hepatitis C strain from (b) the screening step, wherein the presence of the polynucleotide identifies the hypervirulent hepatitis C strain in the biological sample and the absence of said sequence indicates the absence of said hypervirulent hepatitis C.
- 38. (Previously Amended) An isolated polynucleotide according to claim 21, further comprising nucleotides 1-180 of SEQ ID NO: 1.
- 39. (Previously Amended) An isolated polynucleotide according to claim 21 or 38, further comprising nucleotides 342-713 of SEQ ID NO: 1.

Claims 40-43 (cancelled).

- 44. (Currently Amended) An The isolated polynucleotide according to claim 21 or 24 comprising a nucleic acid sequence for enhancing protein expression according to claim 24, wherein the a 5'-untranslated region comprising of the nucleic acid sequence comprises a polynucleotide sequence corresponding to at least one region selected from the group consisting of pyrimidine-rich tract, Box A, Box B, a trans factor-binding site, and a combination thereof.
- 45. (Currently Amended) An isolated polynucleotide comprising a nucleic acid sequence for enhancing expression of a nucleic acid sequence according to claim 24 for enhancing protein expression, wherein said polynucleotide comprises a nucleotide sequence of SEQ ID NO: 7, nucleotides 181-341 of SEQ ID NO: 1 having one thymidine inserted between position 206 and 207 of SEQ ID NO: 1 or a fragment thereof that includes said thymidine, and wherein said nucleic acid emprises a sequence has a substitution, deletion, insertion, and/or addition of a single or a few nucleotide nucleotides of a sequence derived taken from a gene of wild type virus within the sequence or proximate sequence in at least one position corresponding to a pyrimidine-rich tract, Box A, Box B, and/or trans factorbinding site contained in the 5'-untranslated region said nucleic acid sequence.

- 47. (Currently Amended) The isolated polynucleotide according to claim 24 44, wherein the 5'-untranslated region comprises at least one pyrimidine-rich tract
- 48. (Currently Amended) The isolated polynucleotide according to claim 24 44, wherein the 5'-untranslated region comprises a sequence corresponding to a region selected from the group consisting of Box A, Box B, a trans-binding site, and a combination thereof.
- 49. (Currently Amended) The isolated polynucleotide according to claim 24 44, wherein the 5'-untranslated region comprises an AUG or ATG sequence.
- 50. (Currently Amended) The isolated polynucleotide according to claim 24 44, wherein the 5'-untranslated region comprises a part or an entire region of IRES of viral mRNA.
- 51. (Currently Amended) The isolated polynucleotide according to claim 24 44, wherein said nucleic acid sequence further comprises a portion of a coding region taken from a viral gene adjacent to the 5'-untranslated region.
- 52. (Previously added) The isolated polynucleotide according to claim 24, wherein said nucleic acid is a cDNA sequence.
- 53. (Previously added) An expression vector according to claim 28, further comprising a protein coding sequence operably inserted downstream of the polynucleotide for enhancing protein expression.
- 54. (Previously added) An isolated polynucleotide comprising nucleotide 181-341 of SEQ ID NO:1, wherein said polynucleotide includes a thymidine inserted between position 206 and 207 of SEQ ID NO:1.
- 55. (Previously Added) An expression vector comprising a promoter sequence, a polypeptide encoding sequence, and a nucleic acid sequence of SEQ ID NO: 7 incorporated downstream of the promoter sequence and upstream of the polynucleotide encoding sequence, wherein the nucleic acid sequence of SEQ ID NO: 7 enhances expression of the polypeptide by means of increasing IRES activity.

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- 56. (Currently Amended) The expression vector according to claim 55, wherein said gene expression vector is a vector for expression in eukaryotic cells.
- 57. (New) An isolated polynucleotide for enhancing protein expression, wherein said polynucleotide comprises the nucleic acid sequence of SEQ ID NO: 7, or a fragment thereof, wherein the polynucleotide or the fragment enhances protein expression by promoting mRNA translation in an IRES independent manner.
- 58. (New) The isolated polynucleotide according to claim 57, wherein said nucleic acid sequence comprises at least one region selected from the group consisting of pyrimidine-rich tract, Box A, Box B, a trans factor-binding site, and a combination thereof.
- 59. (New) The isolated polynucleotide according to claim 58, wherein said nucleic acid sequence comprises at least one pyrimidine-rich tract.
- 60. (New) The isolated polynucleotide according to claim 58, wherein said nucleic acid sequence comprises a sequence corresponding to a region selected from the group consisting of Box A, Box B, a trans-binding site, and a combination thereof.
- 61. (New) The isolated polynucleotide according to claim 58, wherein said nucleic acid sequence comprises an AUG or ATG sequence.
- 62. (New) The isolated polynucleotide according to claim 58 wherein said nucleic acid sequence comprises a part or an entire region of IRES of viral mRNA.
- 63. (New) The isolated polynucleotide according to claim 58, wherein said nucleic acid sequence further comprises a portion of a coding region taken from a viral gene adjacent to said nucleic acid sequence.
- 64. (New) An expression vector comprising the isolated polynucleotide according to claim 57.
- 65. (New) A composition comprising the isolated polynucleotide according to claim 57 which enhances protein expression.